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15 years on

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15 Years on - Early Intervention for a new generation.

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It is 15 years since Early Intervention for Psychosis (EIP) Services were described in the Mental Health Policy Implementation Guide (PIG) [1] for England and Wales and psychosis is now the first mental disorder in England to have an NHS Access and Waiting time target. EIP is a model of service delivery to support young people with a first episode of psychosis, its goals being provision of best available treatments, supporting recovery and preventing relapse. EIP services aim to minimise the duration of untreated psychosis (DUP) and to detect individuals who may be at high risk of developing psychosis. EIP embeds ways of working that are distinct from other psychiatric services: these include provision across the adult-child divide (typically serving 14-35 year olds), working with diagnostic uncertainty, a staged model for treating psychosis, understanding and maintaining developmental trajectories, together with a focus on family, education, vocation and psychosocial interventions. In this editorial, we will review the evidence for EIP, UK service provision, challenges and areas of on-going debate, and future development.

Evidence for Early Intervention in Psychosis Services

There is data for both the clinical and cost-effectiveness of EIP[2]. Within EIP, patients have lower rates of detention under the Mental Health Act, achieve higher employment levels and lower rates of suicide compared to generic services [3]. Cost effectiveness is achieved by the reduction of relapse rates and inpatient occupancy, and an increase in paid employment[4]. A Cochrane review demonstrated evidence for specialist EI services improving outcome for those with first episode of psychosis, but with a question remaining as to whether such gains are maintained [2]. However, there is data which suggests the benefits of longer term provision of EIP, with the TIPS study offering 10 year follow-up data for those with a first episode of psychosis [5] and the poor outcomes of those after discharge from EIP [6]. This has generated the potential for an approach of streaming EIP to those for longer who may be at most risk of a worst outcome and hence stratifying the first-episode population [7].

Despite the economic and clinical evidence and the growth of EIP in the first decade after the PIG, EIP provision across the UK subsequently began to decline with services being disbanded, becoming age independent, or their functions merged with other teams. The important *Lost Generation* report demonstrated that at least 50% of services had their budget cut, lost staff or were offering a poorer quality service. Reductions in services have, in some areas, diluted the EIP model so as to be offering essentially generic community services which are unlikely to offer the potential clinical benefits [8].

Challenges in early intervention

A major challenge is that of boundaries and thresholds; that is, whether a given patient is experiencing a first-episode of psychosis (FEP). For some teams this means clients meeting criteria for an episode of schizophrenia, both in terms of symptoms, of duration, and of independence from drug use; whereas others take

a one-week duration of frank psychotic symptoms, with co-existing substance misuse as well as other comorbidities, as indexing first episode. Frequently the debate on entry criteria to teams can hinge on auditory verbal hallucinations and whether they are thought to be part of a primary psychotic disorder or instead part of an emerging personality disorder or of so called "complex PTSD". Relatedly, there can be debate when a young person with an autistic spectrum disorder presents to services with ideas of persecution or reference, coupled with a functional decline. Often the situation is not clear. From an EIP perspective, a descriptive phenomenological approach to psychopathology is essential, assumed aetiology of the experience should not unduly influence categorization, and teams need to recognize the reality of comorbidity. Not infrequently, because the experiences of a patient can be understood narratively in the context of their traumatic autobiography, clinicians (both in EIP and others) can label the experiences as not really 'psychotic'. This is both an incorrect understanding of Jaspers (where 'un-understandability' refers to primary delusions) and is also inconsistent with evidence linking trauma to the genesis of psychosis, and rests on an assumption of psychosis being a simplistic, reductive, biological process [9]. Understanding of aetiology and formulation is essential but should not be automatically linked to specific interventions: a history of trauma does not obviate the use of antipsychotics and conversely, the absence of psychological narrative shouldn't prevent the use of psychotherapeutic interventions.

Alongside these clinical challenges, there are economic ones. In addition to the diminution of EIP teams, with budget restraint, dedicated consultant input into EIP teams has often been significantly reduced from the original model. We argue this is counterproductive. The role of the psychiatrist in the EIP team encompasses skills needed from all consultants: leadership, team working, diagnostic and management skills, risk management, use of evidence-based pharmacotherapy and responsibility within the Mental Health Act, but includes two that are particularly important in this population. The first is the ability to ascertain psychopathology in the context of its early development, whilst accepting diagnostic uncertainty. This is a challenge when seeing people early with the aim of reducing DUP. Patients present when normal developmental changes are taking place in parallel with the onset of illness, and the picture is frequently complicated by transitions of moving into higher education or work; comorbid mental health problems are also very common. The second core role of the psychiatrist is an ability to utilize the growing information around the neuroscience of psychosis, an example being the consideration of autoimmune encephalitis as a presentation, in providing tailored and evidence based prescribing to this population, and the increasing need for physical health management [10]. These issues place the consultant psychiatrist at the centre of EIP challenges.

Ongoing Research and Areas of Development

Beyond the First Episode of Psychosis: expanding into disorder-specific and non-specific areas.

The principles of EIP have been expanded into other clinical areas. One of these areas is the identification and treatment of those thought to be putatively prodromal for a psychotic illness, so-called clinical or ultra high-risk patients (UHR). This approach has been influential in research and in understanding the onset of schizophrenia and other psychoses. It has also led to two distinct approaches: staging models of mental illness and non-disorder-specific approaches to youth mental health and development of EI strategies for other disorders. In this article we describe the example of EI for bipolar disorder.

1. *High-risk states and non-specific staging strategies*

There has been considerable research endeavor into the recognition of individuals in the putative prodromal stage of a psychotic disorder. One of the most widely set of criteria used to try and detect the prodrome are the "Ultra High Risk" (UHR) criteria. A meta-analysis has shown these criteria identify subsequent development of a psychotic disorder in 21% at 1 year follow-up, 29% at 2 years, and 36% at 3 years [11] in a young help seeking population with either/or low grade or frequency psychotic like symptoms, very brief self-resolving periods of psychosis and a family history of psychosis along with functional decline. This reflects a relative risk of around 500 times that of the general population. This has prompted trials of prevention in this group such as the use of low dose antipsychotics, omega 3 fatty acids and cognitive behavioural therapy (CBT). Meta-analyses suggest that these approaches may be beneficial in reducing the rate of people developing psychotic disorders, at least in the short term, with Number Needed to Treat of around 9 at 12 months and a risk reduction of 54%[12]. A vigorous debate in the DSM-5 working group rejected the inclusion of a category termed "attenuated psychosis syndrome" in the main body of the document pending more research[13]. There are relatively few UK EIP services that have adopted these or similar criteria and offer specific interventions to this group. This is likely to change with the inclusion of at risk individuals in the new waiting time targets for first episode psychosis. Research has highlighted the clinical need and the poor outcomes of this group, regardless of whether they develop a psychotic disorder, and the approach of EIS should also be focused to preventing development of other poor outcomes. However, over the last few years issues such as the possible reduction of transition rates to frank psychosis in UHR clinics and the knowledge of relatively high rates of psychotic experiences in the general population means that the criteria may be in need of further refining.

Arising from some of this work is the concept, adapted from other areas of medicine, of a clinical staging approach to psychosis [14], which would allow appropriate interventions to be delivered at the right stage. Whilst some individuals will clearly progress through these stages, for others it is fluid and the outcomes much less predictable.

2. *EI for bipolar disorders*

Over the last decade work has been developing on the rationale and possibilities of EI in mood disorders. Bipolar disorder (BD) is highly burdensome in 10-24year olds and the disorder typically begins in early adulthood (13-30 years). Response to pharmacological and psychological treatments is thought to be best earlier in the disorder [15] and there is a step-wise decline in cognition, quality of life and employment with increasing episode number [16]. Thus, as in the case of psychosis, early specialist treatment has the potential to change the outcomes of those affected. Symptoms suggested to be part of the antecedents of a first episode of mania include mood instability, depression and irritability. A major clinical diagnostic uncertainty for clinicians is whether these symptoms reflect the emergence of BD or borderline personality disorder. In those who are help seeking proposed bipolar at risk criteria can identify a group of young people, 14.3% of which will transition to bipolar disorder at 1 year [17]. It is likely that a substantial improvement in predictive validity will require the addition of biomarkers. Specialist EI services for people with a first episode of BD are limited within the UK context, though Danish evidence suggests they are clinically and cost-effective [18]. Whilst some EIP services accept people with bipolar disorder, the care pathways delivered to them can be a challenge for staff. Research is needed into service configurations and treatment programs that constitute optimal care in this age and diagnostic group, as a basis for commissioning these.

Conclusion

EIP arose from an assertive outreach model for community care for FEP at the end of the asylum era, when categorical diagnoses were less challenged and our knowledge about pathways to early psychosis was in its infancy. They were introduced in times of investment within the NHS and offered a step change in focusing on recovery and de-stigmatization of psychotic illness. Now, 15 years on, we have increasing evidence of their acceptability and effectiveness as a clinical service model. They have allowed greater scientific understanding of the early phases of psychosis and been a cornerstone to the challenge of psychiatric classification and prognostic certainties.

Yet, since initial funding, in England EIP has faced continual financial challenge, and there are now real concerns that significant numbers of young people across the country do not have access to these services. Within the advent of the new NHS Access and Waiting Time for first episode psychosis there is hope that this can be reversed, however EIP models now need to reflect what we have learned and adapt with an emphasis on “phase specific” interventions including in the longer term and, as evidence grows, the expansion of this approach to other disorders. New targets will require dedicated teams able to deliver psychopharmacological as well as psychological interventions to improve outcomes. Further, the new target argues for age-inclusivity of services and

hence assumes that the evidence and tools developed in a demarcated age-range with psychosis are generalizable to a wider group. Further research will be required to determine if this is indeed the case, or whether the care is diluted, or only a sub-proportion of age-inclusive EIP clients gain the benefits of the service. Staff required in a modern EIP service need flexibility and core skills, be able to maintain hope and optimism, yet not mislead or diminish the severity of psychotic illnesses, the need for intensive treatment and the longer term impact. To achieve this investment and commitment is needed. Whilst time to treatment for FEP is the first mental health Access and Waiting time target, this will be meaningless if not followed by the highly skilled, sustained and intensive treatment known to be needed to achieve improved outcomes. These are issues for EIP in other countries, with differing health care funding models such as the US, are yet to encounter [19].

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Suggested CPD resources:

The Medical Manual Writing Group (2014) *Medical Management of First Episode Psychosis.* Orygen Youth Health Research Centre, Melbourne

Thompson, A., Fraser, R., Whale, R. (2015*) First episode psychosis: Assessment, diagnosis and rationale for specialist treatment approach.* Royal College of Psychiatrists CPD Online module

Thompson, A., Fraser, R., Whale, R. (2015) *First episode psychosis: Treatment approaches and service delivery* Royal College of Psychiatrists CPD Online module

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